

Title (en)

MODIFIED NOROVIRUS VP1 PROTEINS AND VLPS COMPRISING MODIFIED NOROVIRUS VP1 PROTEINS

Title (de)

MODIFIZIERTE NOROVIRUS-VP1-PROTEINE UND VLPS MIT MODIFIZIERTEN NOROVIRUS-VP1-PROTEINEN

Title (fr)

PROTÉINES VP1 DE NOROVIRUS MODIFIÉES ET PROTÉINES VP1 DE NOROVIRUS COMPRENANT DES VLP

Publication

**EP 3717648 A1 20201007 (EN)**

Application

**EP 18883648 A 20181130**

Priority

- US 201762593006 P 20171130
- US 201862712744 P 20180731
- CA 2018051530 W 20181130

Abstract (en)

[origin: WO2019104439A1] Nucleic acids encoding modified norovirus VP1 proteins, and VLPs comprising one or more of the modified norovirus VP1 proteins are provided. Methods for modified norovirus VP1 protein, and norovirus VLP, production in plants, portions of the plant or a plant cell, are also described.

IPC 8 full level

**C12N 15/40** (2006.01); **A01H 5/00** (2018.01); **A61K 39/12** (2006.01); **A61P 31/14** (2006.01); **A61P 37/04** (2006.01); **C07K 14/08** (2006.01); **C07K 16/10** (2006.01); **C12N 5/10** (2006.01); **C12N 7/01** (2006.01); **C12N 15/82** (2006.01); **C12P 21/02** (2006.01)

CPC (source: EP IL KR US)

**A61K 39/12** (2013.01 - EP IL US); **A61P 31/14** (2018.01 - EP IL KR US); **A61P 37/04** (2018.01 - EP IL KR); **C07K 14/005** (2013.01 - KR US); **C07K 14/05** (2013.01 - EP IL); **C07K 16/10** (2013.01 - EP IL KR US); **C12N 7/00** (2013.01 - US); **C12N 15/8258** (2013.01 - EP IL KR US); **C12P 21/02** (2013.01 - EP IL KR); **A61K 2039/5258** (2013.01 - EP IL KR US); **C12N 2770/16022** (2013.01 - EP IL KR US); **C12N 2770/16023** (2013.01 - EP IL KR US); **C12N 2770/16034** (2013.01 - EP IL KR US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2019104439 A1 20190606**; AU 2018375695 A1 20200611; BR 112020010799 A2 20201110; CA 3083857 A1 20190606; CN 111727255 A 20200929; EP 3717648 A1 20201007; EP 3717648 A4 20211201; IL 274736 A 20200730; JP 2021503962 A 20210215; KR 20200092363 A 20200803; MX 2020005530 A 20210115; RU 2020116307 A 20211230; SG 11202004668W A 20200629; US 11602558 B2 20230314; US 2020330583 A1 20201022; US 2023293663 A1 20230921; ZA 202003831 B 20231025

DOCDB simple family (application)

**CA 2018051530 W 20181130**; AU 2018375695 A 20181130; BR 112020010799 A 20181130; CA 3083857 A 20181130; CN 201880077956 A 20181130; EP 18883648 A 20181130; IL 27473620 A 20200518; JP 2020547260 A 20181130; KR 20207018576 A 20181130; MX 2020005530 A 20181130; RU 2020116307 A 20181130; SG 11202004668W A 20181130; US 201816768524 A 20181130; US 202318165804 A 20230207; ZA 202003831 A 20200624